

VARIABLE SPEED TRANSMISSION FOR SCOOTER

ABSTRACT OF THE DISCLOSURE

[0041] A small, motor-driven vehicle has at least one steered wheel and at least one motor-driven wheel with the rider supported between the wheels. The rider directs the steered wheel while applying motor power through a throttle mechanism to the driven wheel. The throttle mechanism includes a driven shaft from the motor contacting the periphery of the driven wheel. This driven shaft has an adjustable diameter. When the driven shaft is adjusted to have a small diameter, the small, motor-driven vehicle is propelled at low speed and high torque with optimum power transmission for proceeding either uphill or over terrain presenting higher resistance to vehicle passage. When the driven shaft is adjusted to have a larger diameter, the small, motor-driven vehicle is propelled at higher speed and lower torque, on the level, downhill or over terrain presenting lower resistance to vehicle passage. Accordingly, the adjustable diameter of the driven shaft permits optimization of scooter torque and speed for proceeding with optimum motor efficiency.

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